Doctorate Recipients from U.S. Universities: 2009

Division of Science Resources Statistics
Directorate for Social, Behavioral, and Economic Sciences

National Science Foundation ■ DECEMBER 2010

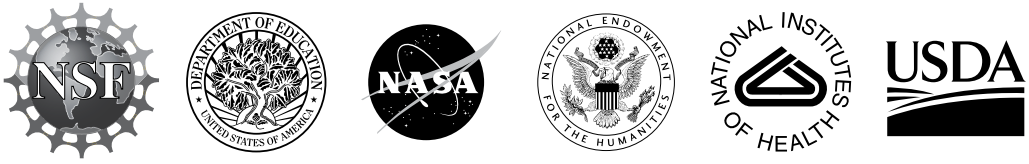
About this Report

THE SURVEY OF EARNED DOCTORATES, the data source for this report, is an annual census of individuals who receive research doctoral degrees from accredited U.S. academic institutions. The survey is sponsored by six federal agencies: the National Aeronautics and Space Administration, National Endowment for the Humanities, National Institutes of Health, National Science Foundation (NSF), U.S. Department of Agriculture, and U.S. Department of Education. These data are reported in several NSF publications, the most comprehensive and widely cited of which is the annual *Doctorate Recipients from U.S. Universities: Summary Report*. This 2009 edition, renamed *Doctorate Recipients from U.S. Universities*, unveils major changes in the format and organization of the report.

The printed report is now a compact, portable volume that calls attention to important trends in doctoral education, organized in this edition into five themes. Each theme highlights an important question about doctorate recipients. Online, the reader is invited to explore trends in greater depth through detailed data tables and interactive graphics at www.nsf.gov/statistics/nsf11306/. Here, too, are technical notes and other online resources, that aid in interpretation of the data. The data tables are available both in portable document format (PDF) and as Excel files for easy viewing, printing, and downloading.

Doctorate Recipients from U.S. Universities:

2009



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Why is this important?

THE AMERICAN SYSTEM OF DOCTORAL EDUCATION is widely considered to be the world's best, as evidenced by the large and growing number of international students each year, many of them among the top students in their countries, who choose to pursue the doctoral degree at U.S. universities. But the continued preeminence of U.S. doctoral education is not assured. Other nations, recognizing the contributions doctorate recipients make to economies and cultures, are investing heavily in doctoral education. Unless doctoral education in the United States continues to improve, the world's brightest students, including U.S. citizens, may go elsewhere for the doctoral degree, and they may begin careers elsewhere as well.

Annual counts of doctorate recipients are measures of the incremental investment in human resources devoted to science, engineering, research, and scholarship, and can serve as leading indicators of the capacity for knowledge-creation and innovation in various domains. The changing characteristics of this population over time—including the increased representation of women, minorities, and foreign nationals; emergence of new fields of study; time it takes to complete doctoral study; expansion of the postdoctoral pool; reduced academic employment opportunities after graduation—reflect political, economic, social, technological, and demographic trends and events. Understanding the connections between these larger forces and the number and characteristics of doctorate recipients is necessary to make informed improvements in this country's doctoral education system.

Doctorate recipients begin careers in large and small organizations, teach in universities, and start new businesses. Doctoral education develops human resources that are critical to a nation's progress—scientists, engineers, researchers, and scholars who create and share new knowledge and new ways of thinking that lead, directly and indirectly, to innovative products, services, and works of art. In doing so, they contribute to the economic growth, cultural development, and rising standard of living of a nation.

Table of Contents

1. Who receives a doctorate?

Each new cohort of doctorate recipients augments the supply of prospective scientists, engineers, and scholars. Data on the changing demographic composition of these cohorts uncover underutilized categories of human resources.

Numbers overall

The number of research doctorates awarded each year shows a strong upward trend overall—average annual growth of 3.6% since 1958—punctuated by periods of slow growth and even decline. The most recent period of fast growth ended in 2007; growth since then has slowed to less than half the previous average annual rate.

The number of doctorates awarded in science and engineering (S&E) fields has exceeded the number of non-S&E doctorates every year. Since the mid-1970s, the number of S&E doctorates has nearly doubled, whereas the number of doctorates in non-S&E fields has barely grown. In 2009 almost three-quarters of all research doctorates were awarded in S&E fields.

Citizenship

In 1989, 27% of all S&E doctorates were awarded to temporary visa holders. Since then, temporary visa holders have accounted for most of the growth in numbers of S&E doctorates. In 2009, doctorate recipients holding temporary visas accounted for 37% of the total number of S&E doctorates awarded.

Over the period 1999 to 2009, 83% of the doctorates earned by temporary visa holders were in S&E fields, compared with 61% of doctorates earned by U.S. citizens and permanent residents. Ten countries accounted for more than two-thirds of the doctorates awarded to temporary visa holders over the past 10 years, and the top three—China, India, and South Korea—accounted for nearly half.

Sex

Women are becoming increasingly prevalent in each cohort of doctorate recipients, since 2002 earning a majority of all doctorates awarded to U.S. citizens and permanent residents, and earning nearly a third of all doctorates awarded to temporary visa holders. In 2009 women earned nearly 47% of all research doctorates. Most of the growth in the number of doctorates earned by women has been in S&E fields. Women earned 42% of S&E doctorates awarded in 2009, up from 29% in 1989.

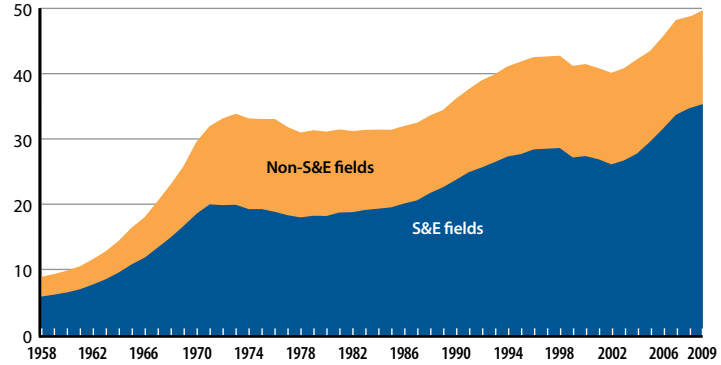
The total number of male doctorate recipients has been growing since 2002, with most of this growth attributable to increasing numbers of male temporary visa holders. Doctorates in S&E fields account entirely for the increase in doctorates earned by men overall. The number of men earning doctorates in non-S&E fields has remained relatively stable over the same period.

Race and ethnicity

Participation in doctoral education by underrepresented minorities is increasing, evidenced by a more than doubling of doctorates awarded to blacks over the past 20 years and near tripling of Hispanic doctorate recipients. These growth rates are much faster than the rate of increase in numbers of white doctorate recipients over the same period.

1A

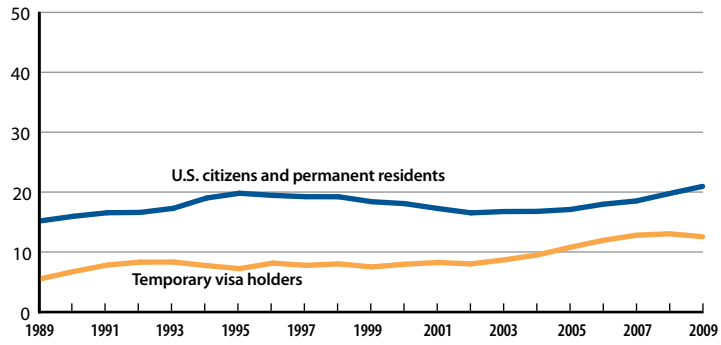
Doctorates awarded by U.S. colleges and universities: 1958–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: table 1.

1B

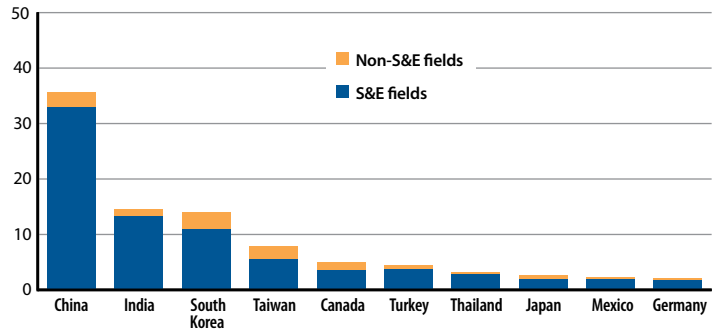
Doctorates awarded in science and engineering fields, by citizenship: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: table 16.

1C

Top 10 countries/economies of foreign citizenship for U.S. doctorate recipients: Total, 1999–2009

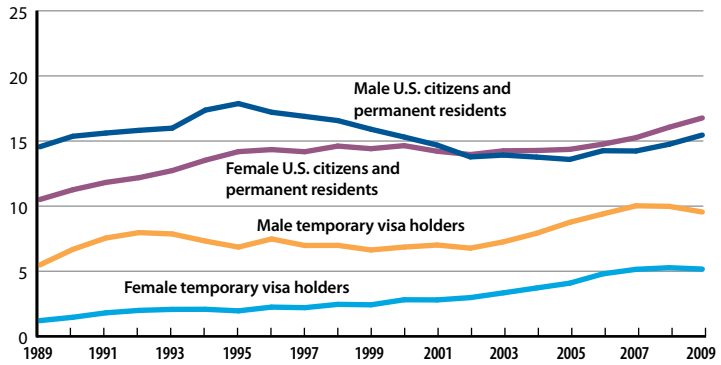


NOTE: China includes Hong Kong.

Doctorate Recipients from U.S. Universities 2009. Related detailed data: table 23.

1D

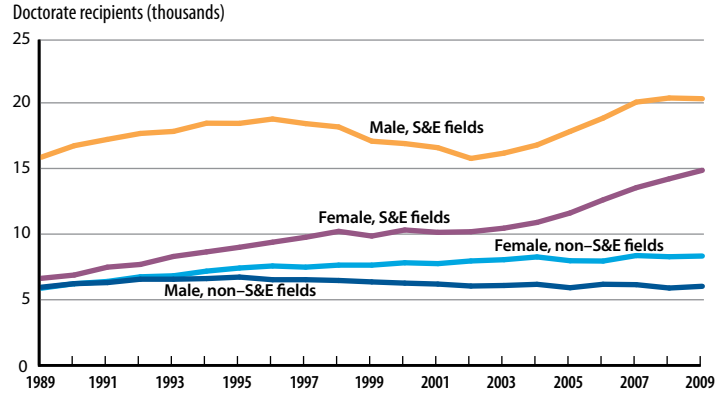
Sex and citizenship of U.S. doctorate recipients: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 18, 19.

1E

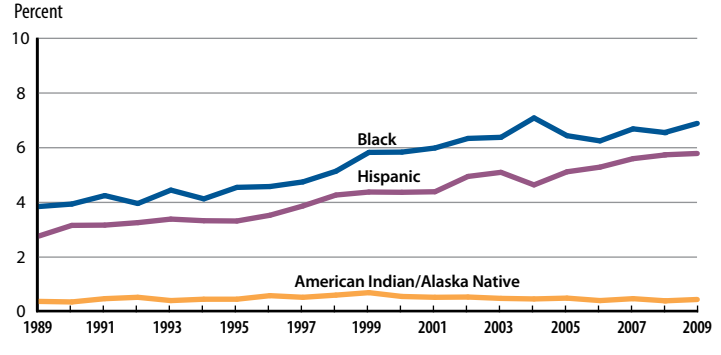
Sex and field of study of U.S. doctorate recipients: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 12, 13, 15.

1F

Doctorates earned by members of U.S. underrepresented minorities: 1989–2009



NOTE: Percentages based on all U.S. citizen and permanent resident doctorate recipients.

Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 9, 17, 20, 21, 22.

2. Which fields attract study?

As research expands our understanding of the world, new fields of study emerge and existing fields change. Observing which fields of study are attracting the brightest young minds can provide early insight into where future breakthroughs may occur.

Field trends

Doctorates in science and engineering (S&E) fields, particularly in life sciences, represent a growing share of all doctorates awarded. The relative share of doctorates awarded in social sciences, education, and humanities has declined over the past decade, even though the number of doctorates in education and in humanities was larger in 2009 than it was in 1999.

Temporary visa holders

In all broad fields of study, the share of doctorates awarded to temporary visa holders is larger today than it was 20 years ago. In 2009, temporary visa holders represented the majority of doctorate recipients in engineering and nearly a majority in physical sciences.

U.S. citizens and permanent residents

Among minority U.S. citizens and permanent residents, doctorate recipients of different racial/ethnic backgrounds tend to be concentrated in different fields of study. In 2009 Asians were the largest U.S. minority population in life sciences, physical sciences, and engineering; blacks earned more doctorates in education and other non-S&E fields than any other minority group; and Hispanics were the largest group in social sciences and humanities.

Women

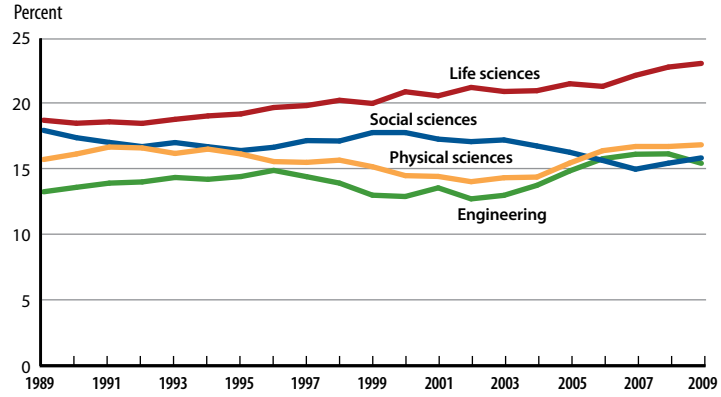
Women's share of doctorates awarded has grown over the past two decades in all broad fields of study. In 2009 women earned the majority or near majority of doctorates awarded in every broad field except physical sciences and engineering.

Although women earn less than 30% of the doctorates awarded in physical sciences and engineering, their numbers are increasing rapidly in those fields. The number of women earning doctorates in physical sciences increased 70% from 1999 to 2009, and the number of female engineering doctorate recipients more than doubled over the decade. These growth rates are three times larger than the growth in numbers of male doctorate recipients in physical sciences and engineering during the same period.

The fastest growing areas of doctoral study for women over the past 10 years have been within subfields of the physical sciences and engineering. The growth rate for female doctorate recipients exceeded the growth rate for male doctorate recipients in every one of these subfields.

2A

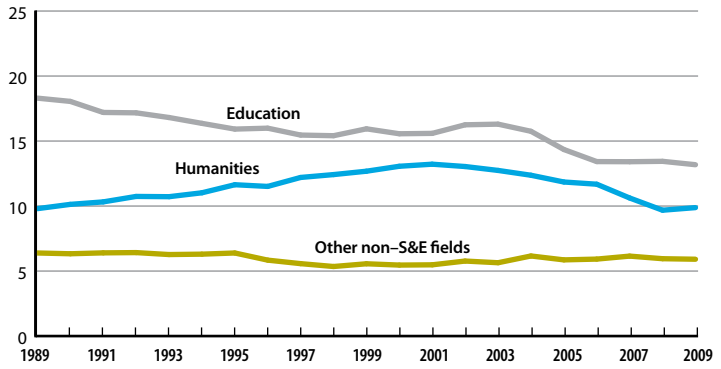
Doctorates awarded in science and engineering fields of study: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 4, 7, 11, 14.

2B

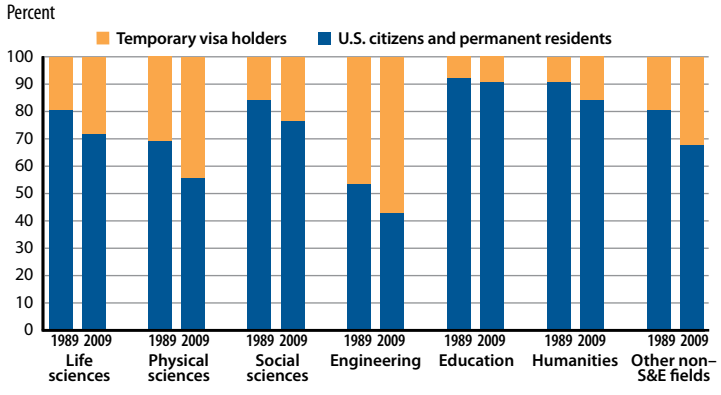
Doctorates awarded in non-science and engineering fields of study: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 4, 8, 11, 14.

2C

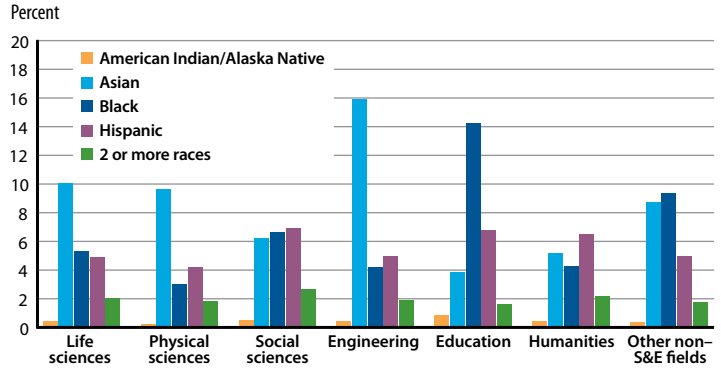
Doctorates awarded, by citizenship and field of study: 1989 and 2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: table 16.

2D

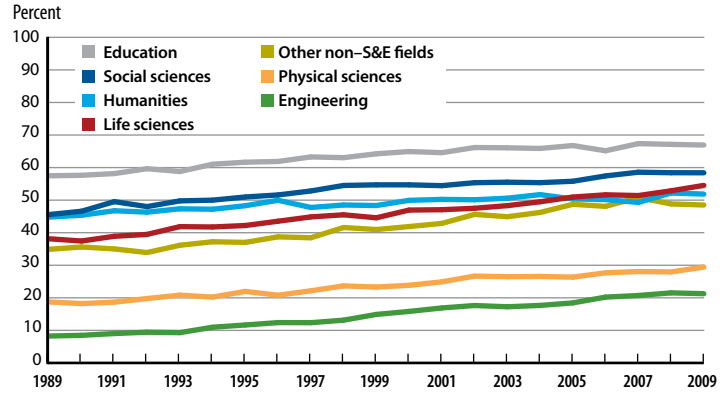
Doctorates awarded to minority U.S. citizens and permanent residents, by race/ethnicity and field of study: 2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 21, 22.

2E

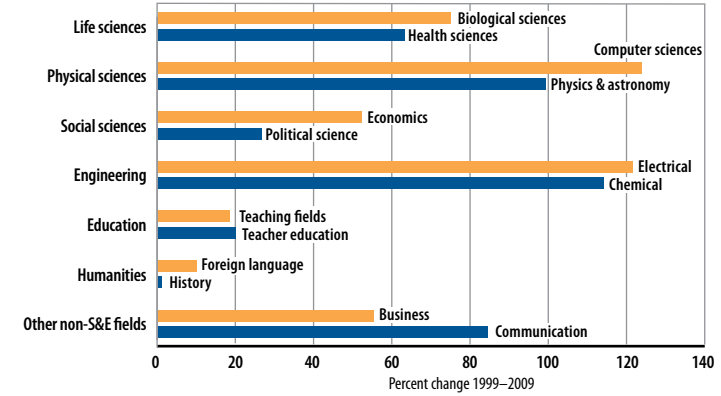
Doctorates awarded to women, by field of study: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: table 12.

2F

Fastest growing subfields for female doctorate recipients: 1999–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 13, 15.

3. What influences the path to the doctorate?

Some paths to the doctorate are less-traveled and some are more difficult to navigate, owing to a variety of influences that shape doctoral study. These paths may lead to different postgraduate destinations.

Family

The parents of recent doctorate recipients are better educated than the parents of those who preceded them. The share of doctorate recipients coming from families in which neither parent has earned more than a high school degree is declining, and the proportion of families in which at least one parent has earned a bachelor's degree or higher continues to climb.

The educational attainment rates of parents of doctorate recipients who are U.S. citizens or permanent residents—of all races and ethnicities—are trending upward. Nonetheless, the parents of underrepresented minority doctorate recipients have lower rates of educational attainment than do the parents of Asian and white doctorate recipients.

As of 2009 about half of American Indian, black, and Hispanic doctorate recipients belonged to families in which neither parent had been awarded a college degree. In comparison, nearly three-fourths of Asian and white doctorate recipients came from families with at least one college-educated parent, and nearly half of Asian and white doctorate recipients had one or more parents who had earned an advanced degree.

Institution

In all broad fields of study except education, the majority of research doctoral degrees are awarded by research universities classified as being "very high research activity" institutions, according to the Carnegie Foundation's classification of institutions of higher education (2005 revision).

The proportion of doctorates awarded by these universities decreased from 1989 to 1999 in all broad fields of study, with education, other non-S&E fields, and life sciences showing the largest declines. The downward trend has continued since 1999 for life sciences, social sciences, engineering, and humanities, although at a slower rate of decline than in the preceding decade.

Duration of study

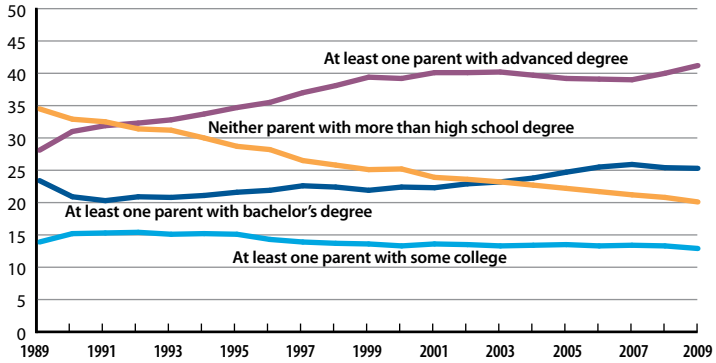
The time that elapses between entering graduate school and earning the doctorate has declined in all fields of study over the last 15 years, especially in fields classified as non-science and engineering. Since 2004 this trend has slowed in all fields.

Despite drops in the time it takes to earn a non-science and engineering doctorate, it continues to take longer to complete doctorates in these fields than it does to complete doctoral training in science and engineering fields.

3A

Parental educational attainment: 1989–2009

Percent doctorate recipients

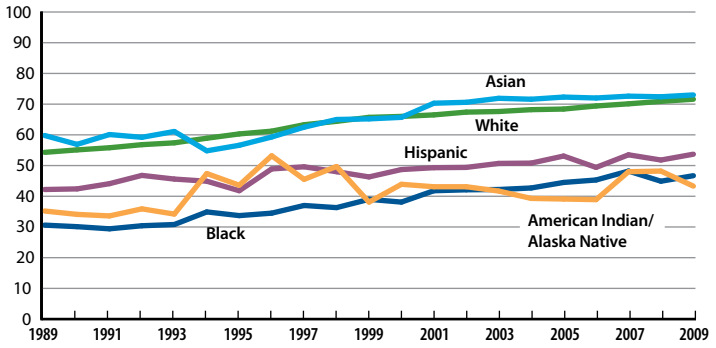


Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 30, 31.

3B

Parental educational attainment, by race/ethnicity: 1989–2009

Percent having at least one parent with a bachelor's degree or higher



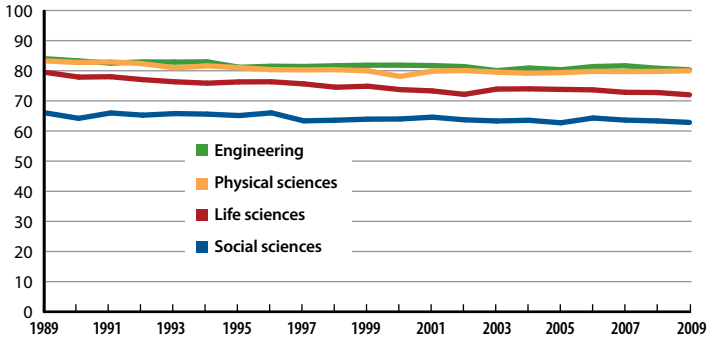
NOTE: Based on doctorate recipients who are U.S. citizens or permanent residents.

Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 30, 31.

3C

Doctorates awarded by "very high research activity" institutions in science and engineering fields of study: 1989–2009

Percent

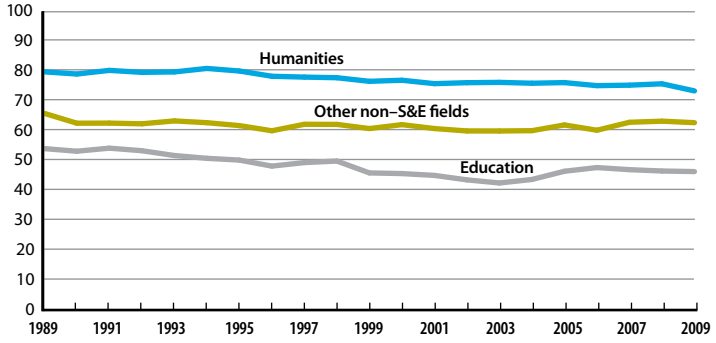


Doctorate Recipients from U.S. Universities 2009.

3D

Doctorates awarded by "very high research activity" institutions in non-science and engineering fields of study: 1989–2009

Percent

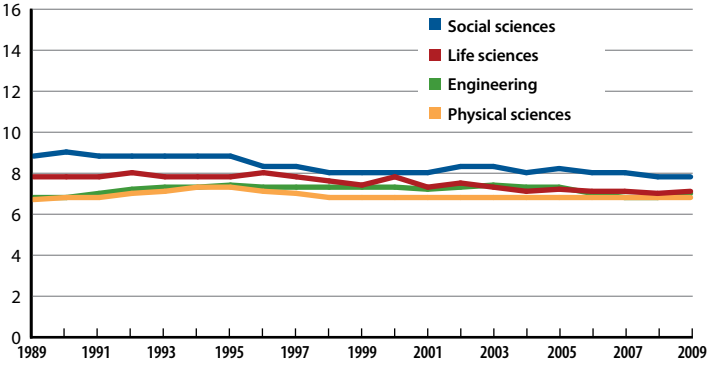


Doctorate Recipients from U.S. Universities 2009.

3E

Median time-to-degree in science and engineering fields of study: 1989–2009

Years (graduate school entry to doctorate)

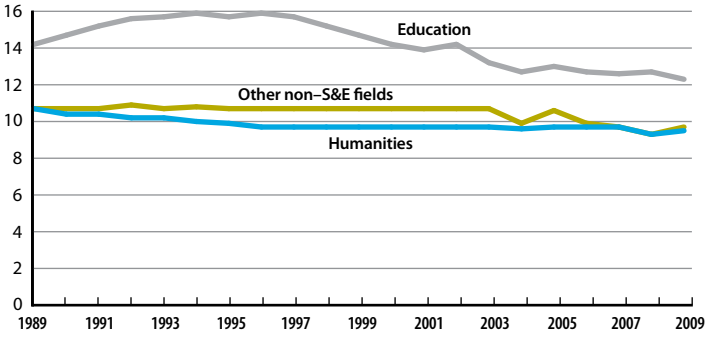


Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 28, 29.

3F

Median time-to-degree in non-science and engineering fields of study: 1989–2009

Years (graduate school entry to doctorate)



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 28, 29.

4. How is it paid for?

The level and type of financial support available to doctoral students affect how long it will take them to complete their degrees and, sometimes, whether they will complete the degree at all. These factors influence the enrollment decisions of the next generation of prospective graduate students.

Sources of financial support

Research assistantships, fellowships, and grants are the most important sources of financial support for a growing proportion of doctoral students. Compared with years past, fewer doctoral students now rely primarily on their own resources—loans, personal savings, personal earnings, and spouse/partner/family earnings—to finance their doctoral studies.

In 2009 fellowships/grants were the most common primary source of support for doctoral students in humanities, in life sciences, and, by a slim margin, in social sciences. Research assistantships were the dominant source in engineering and physical sciences.

Availability of financial support

One measure of the availability of financial support to graduate students is the self-support rate—the proportion of students who rely primarily on their own resources to complete their doctoral studies.

The self-support rate has been declining in all fields of study since 1999. A low self-support rate is an indication that other financial support resources are available, as graduates did not need to use their own resources as the primary means of financing their doctoral education.

Doctorate recipients in life sciences, physical sciences, and engineering fields have had the lowest self-support rates over the past 10 years. Those in education fields have had the highest.

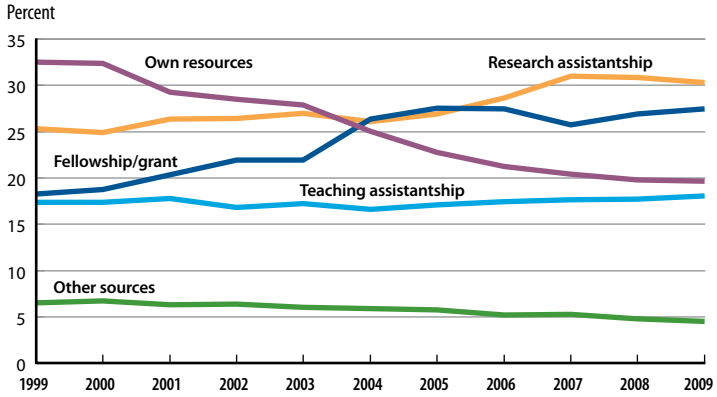
Education-related debt

The amount of education-related debt incurred by doctorate recipients during graduate school is another indicator of the availability of financial support. In 2009 more than two-thirds of doctorate recipients in life sciences and more than three-quarters of those in physical sciences and engineering fields had no debt related to their graduate education when they were awarded the doctorate. In social sciences and in non-science and engineering fields that proportion dropped to about one-half.

In all fields of study roughly 8% to 11% of doctorate recipients had incurred low levels ($10,000 or less) of education-related debt by the time they graduated. The shares of doctoral students with education-related debt burdens over $30,000 were greatest in non-science and engineering fields and in social sciences.

4A

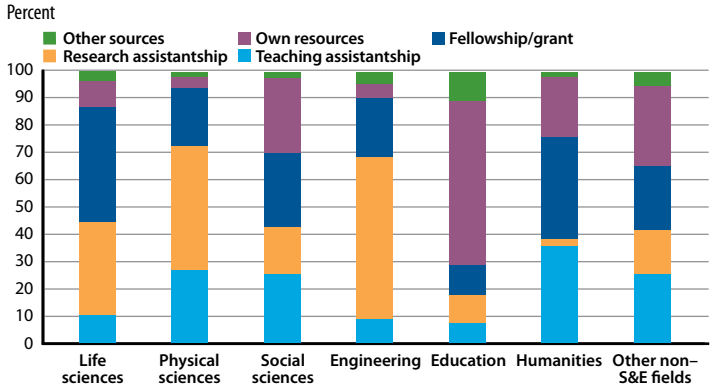
Primary source of financial support 1999–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 32, 33, 34.

4B

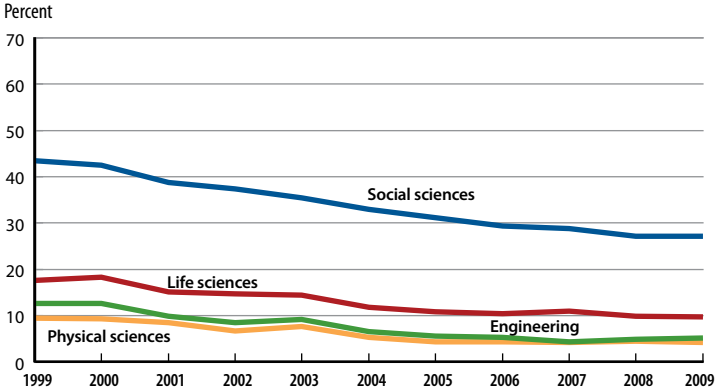
Primary source of financial support, by field of study: 2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 32, 33, 34.

4C

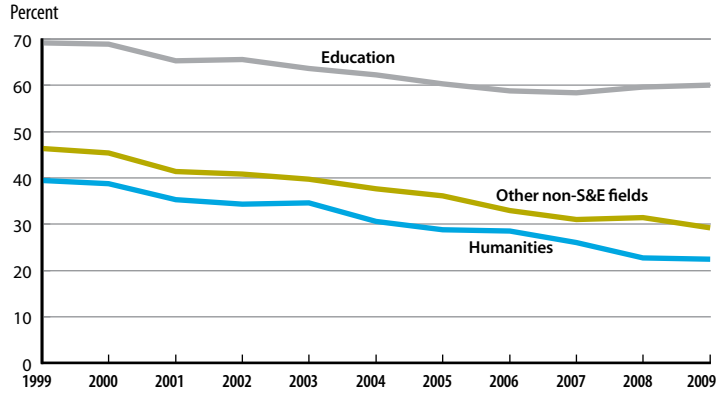
Self-support rate in science and engineering fields of study: 1999–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 32, 33, 34.

4D

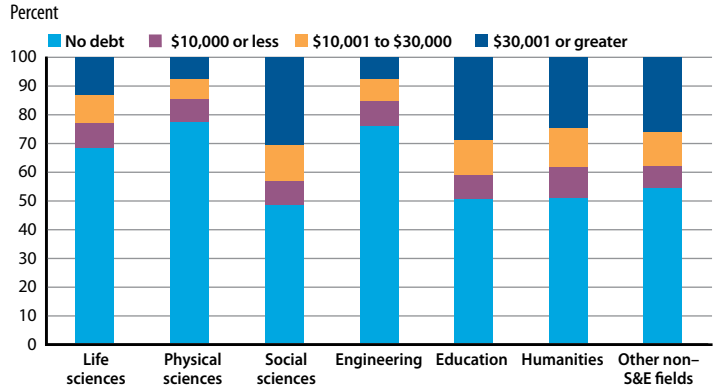
Self-support rate in non-science and engineering fields of study: 1999–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 32, 33, 34.

4E

Graduate education-related debt, by field of study: 2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 35, 36, 37.

5. What are the postgraduation trends?

A graduate's first position after earning the doctoral degree can shape later career opportunities and choices. The changing early career patterns of doctorate recipients will soon be felt in various economic sectors and, eventually, in the ability or inability to attract future generations of students to pursue careers as scientists, engineers, or scholars.

Job market

At any given time, the job market will be better for new doctorate recipients in some fields of study than in others, although all fields tend to follow a similar cyclical pattern that generally reflects overall economic trends. Engineering and physical sciences fields seem to be more sensitive to economic cycles than are other broad fields, as evidenced by the magnitude of the change between high points and low points.

In 2001, 73% of all doctorate recipients reported definite commitments for employment or postdoctoral study at the time the doctorate was awarded, a rate that declined to 69% in 2009.

First postgraduate position

Historically, postdoctoral (postdoc) positions have been a common part of the early career paths of doctoral scientists who were trained in life sciences and physical sciences, and a majority of doctorate recipients in these fields now take postdoc positions immediately after graduation. Postdoc positions are becoming increasingly prevalent in engineering and social sciences fields as well.

Median salaries

Doctorate recipients who take postdoc positions report similar salaries regardless of their field of study. In all broad fields, postdoc salaries are lower than salaries reported by doctorate recipients entering non-postdoc employment in industry and, except in humanities, are lower than salaries reported by those entering non-postdoc employment in academe. Academic salaries lag behind industry salaries in all broad fields.

In 2009 doctorate recipients who had definite commitments in the United States in the coming year reported annual salaries that varied according to their field of study and the type of position to which they committed.

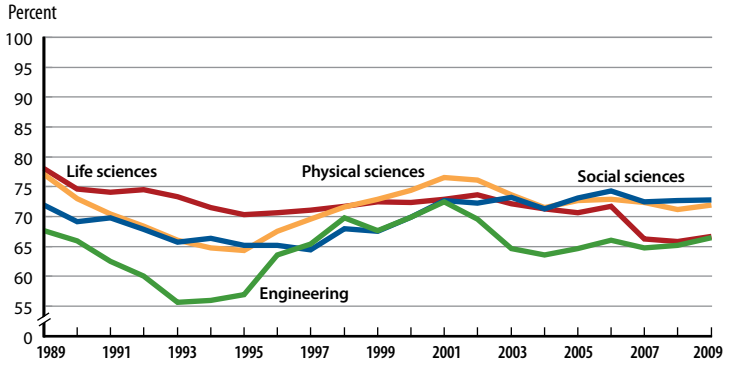
Postgraduation location

Temporary visa holders are increasingly likely to stay in the United States immediately after earning the doctoral degree, a measure referred to as the "stay rate."

The stay rate dipped slightly immediately after September 11, 2001, climbed again, and since 2006 has leveled off for doctorate recipients in all broad fields of study except social sciences and humanities. Stay rates are highest in fields where temporary visa holders are most prevalent: engineering, physical sciences, and life sciences.

5A

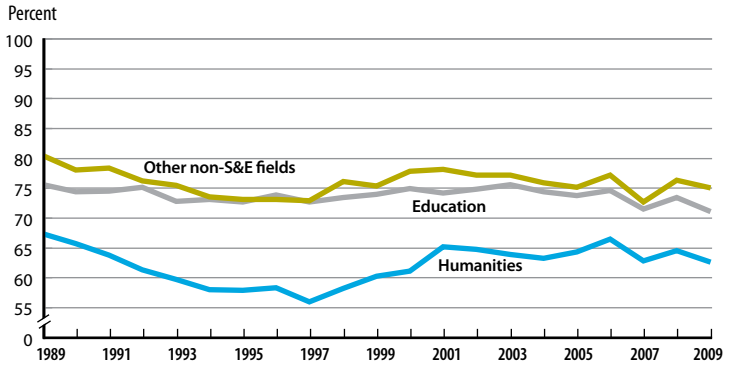
Definite commitments at doctorate award, by science and engineering fields of study: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 38, 39.

5B

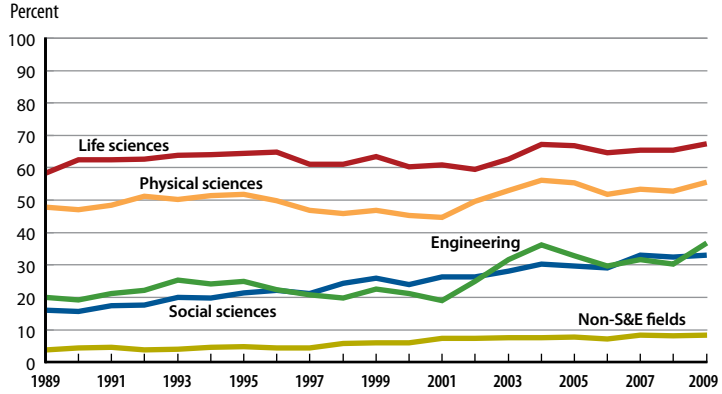
Definite commitments at doctorate award, by non-science and engineering fields of study: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 38, 39.

5C

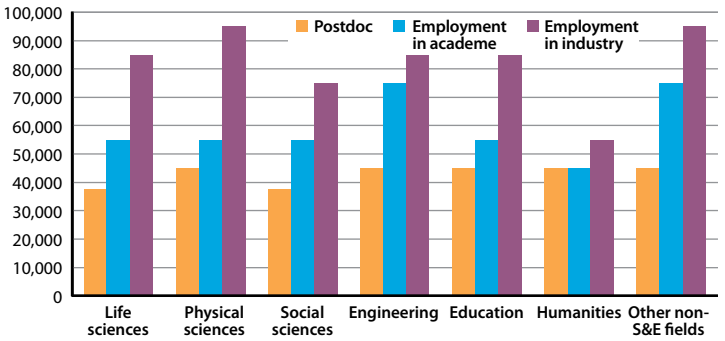
Postdoc rate, by field of study: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 40, 41.

5D

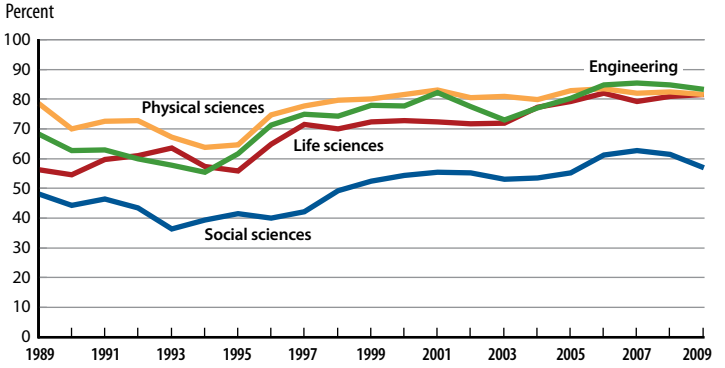
Median salary of doctorate recipients with definite U.S. commitments, by position type and field of study: 2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 44, 45.

5E

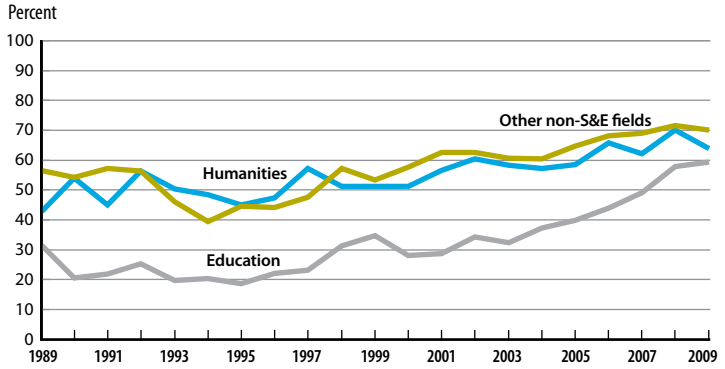
Stay rate of temporary visa holders with definite U.S. commitments, by science and engineering fields of doctoral study: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 47, 48, 49.

5F

Stay rate of temporary visa holders with definite U.S. commitments, by non-science and engineering fields of doctoral study: 1989–2009



Doctorate Recipients from U.S. Universities 2009. Related detailed data: tables 47, 48, 49.

Glossary

Basic annual salary. Annual salary to be earned in the next year, not including bonuses or additional compensation for summertime teaching or research.

Definite commitment. A doctorate recipient who is either returning to pre-doctoral employment or has signed a contract (or otherwise made a definite commitment) for employment or a postdoc position in the coming year.

Definite employment commitment. A doctorate recipient with a definite commitment for employment in a non-postdoc position in the coming year.

Field of study. The SED collects data on 292 fields of doctoral study. For reporting purposes, these fields are grouped into 35 major fields, and are further aggregated into seven broad fields: life sciences, physical sciences, social sciences, engineering, education, humanities, and other non-S&E fields.

Graduate education-related debt. The amount of debt owed by a doctorate recipient at the time the doctorate is awarded that is directly related to graduate education.

Non-S&E. A grouping of broad fields of study that includes education, humanities, and other non-science and engineering fields.

Parental educational attainment. The highest level of education attained by either parent of a doctorate recipient.

Postdoc position. A temporary position primarily for gaining additional education and training in research.

Postdoc rate. The proportion of doctorate recipients who have definite commitments for a postdoc position among all doctorate recipients with definite postdoctoral commitments.

Race and ethnicity. Doctorate recipients who report Hispanic heritage, regardless of racial designation, are counted as Hispanic. American Indian or Alaska Native, Asian, black or African American, and white doctorate recipients are counted in their respective racial groups if they report one race and do not report Hispanic heritage. Non-Hispanic respondents who indicate more than one race are reported in the category "2 or more races" (data for this category were not collected before 2001). For 2001 and later

data, the "Other/unknown" category includes doctorate recipients who did not respond to the Hispanic ethnicity item, doctorate recipients indicating non-Hispanic ethnicity who did not respond to the race item, and Native Hawaiian and Other Pacific Islanders. For 2000 and earlier data, Native Hawaiian and Other Pacific Islanders are counted in the Asian group. For the purposes of this report, the term "underrepresented minority" refers to the American Indian/Alaska Native, black, and Hispanic groups.

Research doctorate. A doctoral degree that is oriented toward preparing students to make original intellectual contributions in a field of study. Research doctorates require the completion of a dissertation or equivalent project and are not primarily intended for the practice of a profession.

S&E. A grouping of broad fields of study that includes science (life sciences, physical sciences, social sciences) and engineering fields.

Self-support rate. The proportion of doctorate recipients who report "own resources" as the primary source of financial support during their doctoral education.

Sources of financial support. Sources of financial support are grouped into the following five categories: fellowships (includes scholarships and grants), teaching assistantships, research assistantships (includes traineeships, internships, clinical residencies, and other assistantships), own resources (includes loans, personal savings, personal earnings, and earnings/savings of spouse, partner, or family), and other (includes employer reimbursements and foreign [non-U.S.] support).

Stay rate. The proportion of doctorate recipients with temporary visas who have definite commitments for employment or a postdoc position in the coming year and who indicated the location of their commitment is in the United States.

Time-to-degree. The median value of the time elapsed from the start of graduate school to completion of the doctoral degree. In addition to this measure, a second measure of time-to-degree is also reported in the data tables: median value of the time elapsed from completion of the bachelor's degree to completion of the doctorate.

Data Source

THE SURVEY OF EARNED DOCTORATES (SED) is the sole data source for *Doctorate Recipients from U.S. Universities: 2009*. The principal elements of the 2009 SED data collection are described below. More detailed information and related technical tables are available in the technical appendix to this report, available online at www.nsf.gov/statistics/nsf11306/.

Survey eligibility. The SED collects information on research doctorate recipients only. Research doctorates require the completion of a dissertation or equivalent project, are oriented toward preparing students to make original intellectual contributions in a field of study, and are not primarily intended for the practice of a profession. The 2009 SED recognized 18 distinct types of research doctorates. In 2009, 94% of research doctorate recipients earned the PhD.

Survey universe. The population eligible for the 2009 survey consisted of all individuals who received a research doctorate from a U.S. academic institution in the 12-month period from 1 July 2008 to 30 June 2009. The total universe consisted of 49,562 persons in 420 institutions that conferred research doctorates in academic year 2009.

Data collection. Survey instruments were mailed to institutional coordinators at each doctorate awarding institution. The institutional coordinators distributed the survey forms to individuals receiving a research doctorate, collected the forms, and returned them to the survey contractor for editing and processing. Data were also collected using Web and telephone versions of the survey. Respondents who did not complete critical survey items were contacted by mail to request response to these items. The National Opinion Research Center at the University of Chicago (NORC) currently conducts the SED under contract to the National Science Foundation.

Survey response rates. In 2009, 92% of research doctorate recipients completed the survey instrument. Limited records (field of study, doctoral institution, and sex) are constructed for nonrespondents from administrative records of the university—commencement programs, graduation lists, and other public records—and are included in the reported total of doctorate recipients. Response rates for 1999–2009 are provided in the technical appendix.

Further Reading

FOR AN OVER-ARCHING VIEW of long-term trends in U.S. doctoral education, as reflected in SED data, please see *U.S. Doctorates in the 20th Century* (NSF 06-319, October 2006, http://www.nsf.gov/statistics/nsf06319/). Summary reports for previous years *(Doctorate Recipients from U.S. Universities: Summary Report)*, available at www.nsf.gov/statistics/doctorates/, provide additional context.

Other publications from the National Science Foundation use SED data to report on focused topics. Publications that relate to the topics covered in *Doctorate Recipients from U.S. Universities: 2009* are listed below, by relevant section.

Who receives a doctorate? *and* **Which fields attract study?**

Numbers of Doctorates Awarded Continue to Grow in 2009; Indicators of Employment Outcomes Mixed (NSF 11-305, November 2010, http://www.nsf.gov/statistics/infbrief/nsf11305/).

Numbers of U.S. Doctorates Awarded Rise for Sixth Year, but Growth Slower (NSF 10-308, November 2009, http://www.nsf.gov/statistics/infbrief/nsf10308/).

2007 Records Fifth Consecutive Annual Increase in U.S. Doctoral Awards (NSF 09-307, November 2008, http://www.nsf.gov/statistics/infbrief/nsf09307/).

What influences the path to the doctorate?

Role of HBCUs as Baccalaureate-Origin Institutions of Black S&E Doctorate Recipients (NSF 08-319, August 2008, http://www.nsf.gov/statistics/infbrief/nsf08319/).

Baccalaureate Origins of S&E Doctorate Recipients (NSF 08-311, July 2008, http://www.nsf.gov/statistics/infbrief/nsf08311/).

Time to Degree of U.S. Research Doctorate Recipients (NSF 06-312, March 2006, http://www.nsf.gov/statistics/infbrief/nsf06312/).

What are the postgraduation trends?

Emigration of U.S.-Born S&E Doctorate Recipients (NSF 04-327, June 2004, http://www.nsf.gov/statistics/infbrief/nsf04327/).

Plans for Postdoctoral Research Appointments Among Recent U.S. Doctorate Recipients (NSF 04-308, March 2004, http://www.nsf.gov/statistics/infbrief/nsf04308/).

Interstate Migration Patterns of Recent Science and Engineering Doctorate Recipients (NSF 02-311, February 2002, http://www.nsf.gov/statistics/nsf02311/).

Online Resources

AN INTERACTIVE VERSION of the printed report and its related resources, each described below, are available on the Web at www.nsf.gov/statistics/nsf11306/.

Data tables. Data on the full range of survey items collected by the 2009 Survey of Earned Doctorates are presented in 66 detailed statistical tables. Figures in this report reference the related detailed data by table number. The full set of tables is available for download, either as Excel files or in portable document format (PDF).

Figures. The figures illustrating each theme can be downloaded as PowerPoint presentation slides, as JPEG images, or as Excel files, together with the figure's source data. All three formats are available from the "Download" tab associated with each figure.

Supporting data. Data supporting each figure in the report is available for download in Excel format.

Survey questionnaire. The questionnaire for the 2009 Survey of Earned Doctorates is linked to the online report.

Acknowledgements

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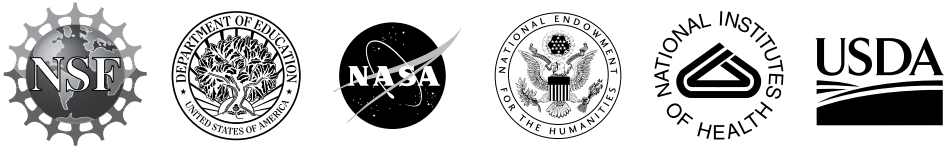
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